

CLAIMS

1) A gumming device for applying gum (2) to an article (4); the gumming device (1) comprising an applicator body (6), which has a central axis (7), is cylindrically symmetrical with respect to the central axis (7), and has a lateral surface comprising an application surface (22) which comes into contact with said article (4) to apply said gum (2) to the article (4), drive means (11) for rotating said applicator body (6) about said central axis (7), at least one channel (17) extending inside said applicator body (6) and having an end opening (21) at said application surface (22), and supply means (24) for supplying said gum (2) under pressure to said channel (17); said supply means (24) comprising a pump (41) for said gum (2), at least one supply conduit (25, 28) connecting an output of said pump to said channel (17), and a valve (29) for closing the supply conduit (25, 28); the gumming device being characterized in that said valve (29) is located along said supply conduit (25, 28) and is carried by said applicator body (6).

2) A gumming device as claimed in Claim 1, wherein said supply means (24) comprise an actuating device (33) for actuating said valve (29) to and from a closed position closing said supply conduit (25, 28); said actuating device (33) being located in a fixed position outside said applicator body (6).

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3) A gumming device as claimed in Claim 1 or 2, wherein said valve (29) comprises a valve seat (32) for the passage of said gum (2), a movable valve body (30), and an actuating device (33) for moving said movable valve body (30), in a control direction (31) crosswise to said central axis (7), to and from a closed position closing said valve seat (32).

4) A gumming device as claimed in Claim 3, wherein said actuating device (33) is located in a fixed position outside said applicator body (6); said valve body (30) comprising at least one portion (38) of ferromagnetic material; and said actuating device (33) comprising generating means (37) for generating a magnetic field.

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5) A gumming device as claimed in Claim 3 or 4, wherein said valve (29) comprises an articulated parallelogram (35) connecting said valve body (30) to said applicator body (6); said articulated parallelogram (35) keeping the valve body (30) in said closed position in the absence of an opening thrust generated by said actuating device (33).

6) A gumming device as claimed in any one of Claims 1 to 5, wherein said channel (17) comprises at least one capillary portion (20).

7) A gumming device as claimed in Claim 6, wherein said capillary portion (20) is an outlet end portion of said channel (17).

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8) A gumming device as claimed in any one of Claims 1 to 7, wherein said applicator body (6) comprises a

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cylindrical drum (12) coaxial with said central axis (7);
and a gumming disk (13), which is coaxial with said
central axis (7), is connected removably to said
cylindrical drum (12) to rotate with the cylindrical drum
(12) about said central axis (7), and has a cylindrical
lateral surface (22) coaxial with said central axis (7)
and defining said application surface (22).

9) A gumming device as claimed in any one of Claims
1 to 8, and comprising a number of said channels (17),
10 each defined inside said applicator body (6) and
terminating with a respective said opening (21).

10) A gumming device as claimed in Claim 9, wherein
said supply means (24) comprise a pump (41) for said gum
(2); and a number of supply conduits (25, 28), each
15 connecting an output of said pump (41) to a respective
number of said channels (17).

11) A gumming device as claimed in Claim 10, wherein
said supply means (24) comprise, for each said supply
conduit (25, 28), a respective valve (29) located along
20 the respective supply conduit (25, 28) and controllable
to cut off the supply conduit (25, 28).

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25 12) A gumming device as claimed in any one of Claims
1 to 11, and comprising a cleaning device (46) acting on
said application surface (22); said cleaning device (46)
comprising at least one nozzle (47) for spraying a jet
(50) of pressurized cleaning fluid tangentially with
respect to said application surface (22).

13) A gumming device as claimed in any one of Claims

1 to 12, wherein said supply means (24) comprise a first tank (43) for said gum (2); a second tank (42) for a cleaning fluid; and valve means (44) for selectively connecting said two tanks (42, 43) to said channel (17).

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14) A gumming device as claimed in any one of Claims 1 to 13, and comprising actuating means (45) for moving said applicator body (6) between a gumming station (S1), for applying said gum (2) to said article (4), and a cleaning station (S2).

10 15) A gumming device as claimed in Claim 14, wherein said cleaning station (S2) comprises a further cleaning device (54) acting on said application surface (22); said further cleaning device (54) comprising at least one nozzle (55) for spraying a jet of pressurized cleaning
15 fluid radially with respect to the application surface (22).